

ABSTRACT

[0092] The invention disclosed in this application discloses a method for modulating and demodulating compressed binary information that was derived from a binary information stream composed of a binary data sequence of first and second binary states that was modulated onto a carrier which has a waveform with a continuous sequence of wavelets with similar amplitudes defined by a 360 degree cycle between crossover positions representing a substantially zero energy level in which the carrier has been modulated in accordance with said binary data sequence by grouping said wavelets into wavelet groups containing two or more wavelets, receiving said information stream as a binary data sequence of first and second binary states; grouping said binary data sequence of first and second binary states into binary groups of two or more first and second binary states; correlating one of each said wavelets in said wavelet group with one of each possible binary values of each said binary groups, modulating said carrier in accordance with said binary data sequence by altering the amplitude or frequency of the one of each said wavelets in said wavelet groups corresponding to one of each said binary values of said binary groups resulting in a compressed binary modulated carrier, demodulating said compressed binary modulated carrier by detecting the respective amplitudes or frequencies of said wavelets to identify said altered wavelets in said wavelet groups and correlating to said binary values of said binary groups, and reconstructing said binary data sequence from said binary groups resulting in regeneration of said information stream.